

EXHIBIT I

ATTORNEYS' EYES ONLY – SUBJECT TO PROTECTIVE ORDER

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA**

**OPTRONIC TECHNOLOGIES, INC., d/b/a
Orion Telescopes & Binoculars**

v.

Case No. 5:16-cv-06370-EJD

**NINGBO SUNNY ELECTRONIC CO., LTD.,
SUNNY OPTICS, INC., MEADE
INSTRUMENTS CORP., et al**

Expert Report of J. Douglas Zona, Ph.D.

I. INTRODUCTION

1. My name is J. Douglas Zona. I received a Ph.D. in economics from the State University of New York in Stony Brook in 1986, with a focus on Industrial Organization and Microeconomic Theory. Since then I have worked as an adjunct professor at New York University and as a practicing economist, including as a Vice President at National Economic Research Associates, Cornerstone Research, and CRA International, where my work has focused on the economics of antitrust and competition issues. My full qualifications are listed in my CV, which is attached hereto as Appendix A.
2. I have published articles in which I applied economic theory and statistical and econometric tools in a variety of applications in the areas of antitrust economics and industrial organization, many of which have been cited widely. I have also been asked to present at conferences and meetings relating to econometrics and antitrust, including on multiple instances before the ABA Section of Antitrust Law, to the Antitrust Division of the United States Department of Justice, and to the Antitrust Law Section of the New York State Bar Association. A fuller list of my publications,

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69. This aspect of the conspiracy's market power is acknowledged and emphasized in the co-conspirators' internal emails. For example, David Shen, the head of Synta wrote to Sunny, "Orion abandons Celestron and Synta, but works with other third parties, I think Orion has no chance to maintain normal operations . . . resulting in an immediate operational crisis."⁴⁶

70. Orion has settled with Synta and thereby obtained a supply agreement and has attempted to use alternatives such as [REDACTED] to replace shipments from Sunny. However, these telescopes are plagued by poor quality, design, and use of materials. [REDACTED] is unable to do assembly efficiently, and Orion regularly receives complaints about [REDACTED] products from consumers and retailers.

71. The largest alternative option to Sunny/Synta is JOC/Bresser. However, JOC lacks IP and the sophistication, quality, and reliability of Sunny and Synta. Moreover, JOC's costs are not competitive.⁴⁷ Defendants also appear to recognize that they have no meaningful competitors. Defendants comment in internal emails "JOC/GOS/BOSMA/IOPTRON . . . No company can replace CELESTRON . . . SKYWATCHER . . . MEADE . . ."⁴⁸ Synta chief David Shen wrote to Sunny that, "Dave [Anderson, CEO of Celestron] does not believe that JOC has the ability to supply (mid, high-end product)."⁴⁹

72. In sum, Sunny and Synta have market power in the relevant antitrust market for telescope manufacturing service.

IV. DAMAGES

73. In constructing a damages model, one typically compares actual economic results to those in a "but-for world", which is a reference to the counterfactual situation in which the defendants did not engage in the alleged misconduct and instead pursued

⁴⁶ NSE00073780

⁴⁷ Interview with Peter Moreo, January 2, 2019.

⁴⁸ NSE00073782

⁴⁹ NSE00073782

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their next-best (i.e., profit-maximizing) legal course of action.⁵⁰ The but-for world may also reflect how other market participants might have reacted to the changed circumstances in the counterfactual.⁵¹ Damages are the difference between the plaintiff's actual economic results and those in the but-for world.

74. For present purposes I will assume that in the but-for world Sunny and its co-conspirators would not have colluded to set prices, divide the consumer telescope manufacturing market between themselves, and collude to prevent Orion from purchasing the Meade and Hayneedle assets.

- Orion would have acquired Meade assets at the time at fair market value;
- Orion would have acquired Hayneedle assets earlier and with their value intact;
- Orion would have benefitted from competition between Sunny and Synta, as well as had the Meade assets available;
- Orion would have purchased from Sunny.

75. Because of the multiple types of activity presumed in furtherance of their conspiracy, damages in this case is computed as the sum of series of different damage components reflecting the different anticompetitive behavior. The damage categories are mutually exclusive and there is no double counting.

A. Damages from Input Price Overcharge

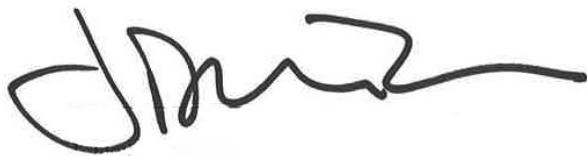
⁵⁰ See, e.g., Mark A. Allen, Robert E. Hall & Victoria A. Lazear *Reference Guide on Estimation of Economic Damages*, Reference Manual on Scientific Evidence, Third Edition, Federal Judicial Center, 2011 (“Reference Guide on Damages”) at 432 (“The characterization of the harmful event begins with a clear statement of what occurred. The characterization also will include a description of the defendant’s proper actions in place of its unlawful actions and a statement about the economic situation absent the wrongdoing, with the defendant’s proper actions replacing the unlawful ones (the but-for scenario). Damages measurement then determines the plaintiff’s hypothetical value in the but-for scenario. Economic damages are the difference between that value and the actual value that the plaintiff achieved.”)

⁵¹ See, e.g., *Reference Guide on Damages* at 447 (“In more complicated situations, the damages analysis may need to focus on how an entire industry would be affected by the defendant’s wrongdoing. For example, one federal appeals court held that a damages analysis for exclusionary conduct must consider that other firms beside the plaintiff would have enjoyed the benefits of the absence of that conduct. Thus, prices would have been lower, and the plaintiff’s profits correspondingly less than those posited in the plaintiff’s damages analysis.”)

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literature, my investigation into the economic evidence relevant to Plaintiff's claims, the materials cited herein, and my analyses to date:

- Sunny and Synta have substantial market power in a properly defined worldwide market for telescope manufacturing services;
- Damages from input price overcharges range from about \$11.4 million to \$30.6 million;
- Damages from interfering with assets purchases range from at least \$13.7 million to \$28.5 million;
- Damages from refusing to deal represent about \$1.1 million.



J. Douglas Zona Ph.D.

January 3, 2019